

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application:

Listing of Claims:

1. (Currently Amended) A method for broadcasting of a possibility to use UMTS service in a cell under control of a GSM/EDGE radio access network (GERAN) type radio access network having an Iu interface to a 3G core network, a radio resource management system of the radio access network comprising a first and a second message, which messages are transferred on a first broadcast control channel in said cell, and which first message has at least one spare bit, characterized in that ~~that~~ said first message is system information System Information 3 of GSM system, said spare bit is used (401) for indicating, whether said cell supports an UMTS service, and in a favourable case in which the GERAN controlled cell is determined to support the UMTS service – a second broadcast control channel is described (403; 405; 406) in the second message to at least Iu mobile stations, and - UMTS service information for Iu mobile stations is broadcast on the second broadcast control channel.
2. (Previously Presented) The method of claim 1, characterized in that said first channel is BCCH of the GSM system and said second channel is PBCCH of the GSM system.
3. (Currently Amended) The method of claim 1, wherein the radio access network supports the UMTS- service and does not support a GPRS service, characterized in that said first message further comprises an Iu indicator field, and said second message is system information System Information 13ALT of the GSM system and is legible only to Iu mobile stations.
4. (Currently Amended) The method of claim 1, wherein the radio access network supports both the UMTS service and a GPRS service, characterized in that said second message is system information System Information 13 of the GSM system.

5. (Currently Amended) A method of claim 4, wherein the second channel is available also to the GPRS service, characterized in that said message system information System Information 13 is legible only to Iu mobile stations and Gb mobile stations.

6. (Currently Amended) A method of claim 4, wherein the second channel is not available to the GPRS service, characterized in that a description of the second channel in the message system information System Information 13 is legible only to Iu mobile stations.

7. (Previously Presented) A method of claim 3, characterized in that said Iu indicator field indicates, whether normal BCCH or extended BCCH is used to transfer the second message.

8. (Previously Presented) The method of claim 1, characterized in that said cell is barred against UMTS operation through Iu interface by indicating with said spare bit that UMTS service is not supported in said cell.

9. (New) The method of claim 1, wherein said spare bit is located in a rest octet of the system information 3 message.

10. (New) An apparatus comprising:

a controller having two or more service modes, where the controller wirelessly communicates to at least one wireless terminal an availability of at least one of the two or more service modes through the use of a System Information 3 (SI3) message of a Global System for Mobile communications (GSM) system transferred on a first broadcast control channel, wherein an availability of one of the two or more service modes is indicated through a single spare bit in the first message, and, if it is indicated that the one of the two or more service modes is available, then a second broadcast control channel through which service information of the one of the two or more service modes is to be broadcast is described.

11. (New) An apparatus as in claim 10, wherein the first broadcast control channel is a broadcast control channel (BCCH) of the GSM system.

12. (New) An apparatus as in claim 10, wherein the single spare bit is a spare bit in the SI3 rest octets.

13. (New) An apparatus as in claim 12, wherein the single spare bit is an Iu support indicator.

14. (New) An apparatus as in claim 10, wherein the single spare bit represents the only previously undedicated bit in the SI3 message.

15. (New) An apparatus as in claim 10, wherein the apparatus comprises a base station controller in a GSM/ EDGE radio access network (GERAN) cell.

16. (New) A computer readable medium embodied with a computer program comprising:

computer code for setting a Iu support indicator in a system information 3 SI3 message;

computer code for determining if a general purpose radio system GPRS mode is supported and, if GPRS mode is not supported, describing a power broadcast control channel PBCCH in SI 13alt;

computer code, if it is determined that the GPRS mode is supported, for determining if the PBCCH is available to the GPRS mode, if it is determined that the PBCCH is available to the GPRS mode, then describing PBCCH in SI13 for Gb and Iu mobile terminals, otherwise, describing PBCCH in SI13 for Iu mobile terminals only.

17. (New) A computer readable medium as in claim 16, wherein the Iu support indicator is a single spare bit in a rest octet of the SI3 message.